

## Abstract

The high-pressure pump has a rotationally driven drive shaft (12), which has a shaft portion (26) embodied eccentrically to its axis of rotation (13), on which shaft portion a ring (28) is rotatably supported. The high-pressure pump has at least one pump element (32), which has a pump piston (34), which is driven at least indirectly in a reciprocating motion by the drive shaft (12) via the ring and which rests at least indirectly on the ring (28). The ring (28) is provided, at least on its outer face facing away from the shaft portion (26), with a coating (56) of a friction-reducing paint in at least one region (29), in which the at least one pump piston (34) rests at least indirectly on the ring (28).